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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,812	07/09/2003	Takeshi Saito	240048US2RD	8081

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EXAMINER	
KASRAIAN, ALLAHYAR	
ART UNIT	**PAPER NUMBER**
2616	

NOTIFICATION DATE	DELIVERY MODE
09/24/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Office Action Summary	Application No.	Applicant(s)	
	10/614,812	SAITO ET AL.	
	Examiner	Art Unit	
	Allahyar Kasraian	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 6-18* is/are rejected.

7)☒ Claim(s) *5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *09 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/08/2004 and 08/09/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements submitted on 10/08/2003 and 08/09/2004 have been considered by the Examiner and made of record in the application file.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a

later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. **Claims 1-4, 6, 8-9, 11, 13, 15, and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nordman et al. (US Patent # 7194760 B2)** (hereafter Nordman) in view of **Haartsen et al. (US Patent # 6570857 B1)** (hereafter Haartsen) and in view of **Barret (US 6832321 B1)**.

Consider **claims 1 and 11**, Nordman discloses a communication device for carrying out communications with other communication devices by using a prescribed control protocol on a network comprising (FIG. 2A for Bluetooth device 100 with central processor 210 as the prescribed control protocol):

a tentative address determination unit configured to determine a tentative address which is a candidate for one of addresses managed by the prescribed control protocol (FIG. 2A for random number generator 230 to generate a

pseudonym addresses, FIG. 1 and lines 50-55 of col. 4 for description of pseudonym);

a packet transmission unit configured to transmit an address initialization packet containing the tentative address to the network, in order to check presence/absence of another communication device which is using an address identical to the tentative address (FIG .2A for Bluetooth radio 206 as the packet transmission unit; FIG. 4A, FIG. 4B, lines 14-16 and 25-34 of col. 10, for the address initialization packet, as packet buffer 240, that contains pseudonym address 520; lines 41-44 of col. 2 for checking presence/absence of another communication device and lines 1-12 of col. 3 for checking if the address is identical);

an address determination unit configured to determine the tentative address as an address of the communication device, (FIG. 2 A address manger table 232 lines 64-67 of col. 4) when no response packet from another communication device indicating that an address identical to the tentative address is currently used is received within a first prescribed period of time since transmitting the address initialization packet; and

a transmission prohibition unit configured to prohibit a transmission of the address initialization packet within a second prescribed period of time since receiving the address initialization packet transmitted from another communication device (lines 8-12 of col. 3, "If the rare chance happens that the pseudonym address is the same as another device's address, the newly

generated pseudonym address is not used and another pseudonym address is generated instead.").

However, Nordman fails to disclose explicitly determine the tentative address as an address of the communication device when no response packet from another communication device indicating that an address identical to the tentative address is currently used is received within a first prescribed period of time since transmitting the address initialization packet; and prohibit a transmission of the address initialization packet within a second prescribed period of time since receiving the address initialization packet transmitted from another communication device.

In the same field of endeavor, Haartsen discloses the concept of time management between communication devices in order to decide whether assigning addresses or not (lines 7-15 of abstract, the first prescribed period of time is considered as duration of a master-to-salve time slot, and the second prescribed period of time is considered as duration slave-to-master time slot.)

Therefore, it would have been obvious to a person of ordinary skills in the at the time the invention was made to incorporate the concept of waiting time to assign a address as taught by Haartsen to the communication device disclosed Nordman for purpose of determining when to use an pseudonym address as communication address. The proper motivation is to set time periods for determining a broadcasted address as functional address for a communication device.

Nordman as modified by Haartsen fail to disclose a transmission prohibition unit configured to prohibit a transmission of the address initialization packet.

In the same field of endeavor, Barret clearly discloses a transmission prohibition unit configured to prohibit a transmission of the address initialization packet (FIG. 8 for blocked list 208, lines 32-37 of col. 9)

Therefore, it would have been obvious to a person of ordinary skills in the at the time the invention was made to incorporate the unit to store the list of blocked address as taught by Barret to the communication system disclosed by Nordman as modified by Haartsen for purpose of saving addresses in a storage or memory to avoid using them as functional address. The proper motivation is to assign a unique address to communication device.

Consider **claim 2 as applied to claim 1 above**, Nordman discloses the tentative address determination unit uses a previously used address as the tentative address if the previously used address is maintained, or uses a part of a hardware address of the communication device as the tentative address otherwise (lines 38-45 of col. 6 for Address Retention Options; and lines 60-65 of col. 6, "Pseudonym addresses can be computed prior to when they are needed and then stockpiled by storage in the address management table 234 in the user's device 100. The user can also select that the address be retained for a duration that ends when a piconet context changes for the user's device").

Consider **claim 3 as applied to claim 1 above**, Nordman discloses an address changing unit configured to change the tentative address to another address when the another communication device which is currently using an address identical to the tentative address exists (FIG. 2A for address manager table 232 and lines 9-12, "If the rare chance happens that the pseudonym address is the same as another device's address, the newly generated pseudonym address is not used and another pseudonym address is generated instead"; and lines 57-67 of col. 5 and lines 1-8 of col. 6 for user option to change the pseudonym address changing);

wherein the packet transmission unit also transmits an address confirmation packet containing a changed tentative address obtained by the address changing unit to the network, in order to check presence/absence of another communication device which is using an address identical to the changed tentative address (see the limitation of cited in claim 1);

the address determination unit determines the changed tentative address as an address of the communication device, when no response packet from another communication device indicating that an address identical to the changed tentative address is currently used is received within the first prescribed period of time since transmitting the address confirmation packet (see the limitation of cited in claim 1);

and the transmission prohibition unit also prohibits a transmission of the address initialization packet or the address confirmation packet within the second prescribed period of time since receiving the address confirmation packet transmitted from another communication device (see the limitation of cited in claim 1).

Consider **claim 4 as applied to claim 3 above**, Haartsen discloses the packet transmission unit also transmits a response packet for the address initialization packet of the address confirmation packet transmitted from another communication device, after a period of time correlated to an address value of the communication device has elapsed since receiving the address initialization packet of the address confirmation packet (lines 11-15 of col. 3, "the wireless slave unit can determine whether a subsequent traffic packet from the wireless master unit includes the temporary address and, if so, respond by transmitting a response to the wireless master unit during another subsequent slave-to-master time slot.").

Consider **claim 6 as applied to claim 3 above**, Haartsen discloses the packet transmission unit transmits at least one of the address initialization packet and the address confirmation packet to the network for a plurality of times (lines 35-41 of col. 3, "if a wireless unit desires to access the piconet, it transmits a packet to the wireless master unit during a slave-to-master sub-slot that occurs N

slave-to-master sub-slots after the polling beacon packet, wherein N is a function of the unique response number of the at least one or more wireless slave units.").

Consider **claims 8 and 13**, Nordman as modified by Haartsen and further as modified by Barret disclose A communication device for carrying out communications with other communication devices by using a prescribed control protocol on a network (Nordman, FIG. 2A for Bluetooth device 100 with central processor 210 as the prescribed control protocol), comprising:

a packet transmission unit configured to transmit an address server detection request packet for requesting to become an address server which has a right to determine addresses managed by the prescribed control protocol (Nordman, FIG .2A for Bluetooth radio 206 as the packet transmission unit; lines 52-54 of col. 2, "When the user's device is the master device in a piconet, the pseudonym address will be used in the piconet access code.");

a server determination unit configured to determine the communication device as the address server (Nordman FIG. 2 A address manger table 232 -for devices 114,122 and inquiring devices- and lines 64-67 of col. 4), when no response packet from another communication device indicating that it is the address server is received within a first prescribed period of time since transmitting the address server detection request packet (Haartsen discloses the concept of time management between communication devices in order to decide whether assigning addresses or not, lines 7-15 of abstract); and

a transmission prohibition unit configured to prohibit a transmission of the address server detection request packet within a second prescribed period of time since receiving the address server detection request packet transmitted from another communication device (Nordman lines 8-12 of col. 3, "If the rare chance happens that the pseudonym address is the same as another device's address, the newly generated pseudonym address is not used and another pseudonym address is generated instead."; and Barret discloses a transmission prohibition unit, FIG. 8 for blocked list 208, lines 32-37 of col. 9).

Consider **claim 9 as applied to claim 8 above**, Haartsen discloses the packet transmission unit transmits the address server detection request packet to the network for a plurality of times (lines 35-41 of col. 3, "if a wireless unit desires to access the piconet, it transmits a packet to the wireless master unit during a slave-to-master sub-slot that occurs N slave-to-master sub-slots after the polling beacon packet, wherein N is a function of the unique response number of the at least one or more wireless slave units.").

Consider **claim 15**, since the method disclosed in claim 11 can be implemented by a computer program stored in a computer-readable medium; therefore, **claim 15 is rejected for the same reason(s) set forth for claim 11**.

Consider **claim 17**, since the method disclosed in claim 13 can be implemented by a computer program stored in a computer-readable medium; therefore, **claim 17 is rejected for the same reason(s) set forth for claim 13**.

5. **Claims 7, 10, 12 and 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Nordman et al. (US Patent # 7194760 B1)** (hereafter Nordman) in view of Haartsen et al. **(US Patent # 7194760 B2)** (hereafter Haartsen) further in view of **Barret (US 6832321 B1)** and further in view of **Ohkita et al. (US Patent Application # 2002/0150249 A1)** (hereafter Ohkita).

Consider **claims 7, 10, 12, 14, 16 and 18 as applied to claim 1, 8, 11, 13, 15 and 17 above respectively**, Nordman as modified by Haartsen and further as modified by Barret disclose the claimed invention except the communication device uses the prescribed control protocol which is an Echonet protocol.

In the same field of endeavor, Ohkita discloses the communication device uses the prescribed control protocol which is an Echonet protocol (FIG. 9, par. 0046 and lines 5-7of par. 0130, "The ECHONET address shown in FIG. 10(a) is the address used in the ECHONET, a domestic network standard electric power line communication").

Therefore, it would have been obvious to a person of ordinary skills in the at the time the invention was made to incorporate Echonet protocol as taught by

Ohkita to the communication device as disclosed by Nordman as modified by Haartsen and further as modified by Barret for purpose of applying different address protocol for communication between devices. The proper motivation is to use Echonet standard for communication devices.

Allowable Subject Matter

6. **Claim 5** is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.
    a. Schmidl et al. (U.S. Patent # 7161941 B1) disclose wireless packet communications with extended addressing capacity
    b. Orava et al. (U.S. Patent Application Publication # 2003/0177267 A1) disclose addressing in wireless local area networks
    c. Farris (U.S. Patent # 6546003 B1) disclose telecommunications system
    d. Trisno et al. (U.S. Patent Application Publication # 2002/0052960 A1) disclose automatic assignment of addresses to nodes in a network

8. Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to**:

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P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

9. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Allahyar Kasraian whose telephone number is (571) 270-1772. The Examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 5:00 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Kenneth Vanderpuye can be reached on (571) 272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Allahyar Kasraian
A.K./ak

September 14, 2007

KENNETH VANDERPUYE
SUPERVISORY PATENT EXAMINER